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(71)Applicant : KAO CORP

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## (54) HEAT-RESISTANT ALKALI CELLULASE GENE

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To obtain the subject new heat-resistant enzyme gene producible a heat-resistant alkali cellulase capable of mixing with a detergent for clothing, etc., in a large amount, comprising a heat-resistant alkali cellulase gene encoding a specific amino acid sequence.

**SOLUTION:** This new heat-resistant alkali cellulase gene encodes an amino acid sequence of the formula or an amino acid sequence wherein one or several amino acids are deleted, substituted or added and is useful for a heat-resistant alkali cellulase capable of formulating with a detergent for clothing, etc., in a large amount. The gene is obtained by separating a genome DNA from *Bacillus* sp.KSM-S237 strain by a normal method, performing a genome PCR by using a partially base sequence of a cellulase gene and cloning.

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Met Met Cys Arg Lys Lys Trp Lys Cys Leu Ile Ser Ser Ile Leu Ile
      5              10              15
Leu Val Leu Leu Lys Ser Lys Thr Pro Cys Ala Leu Ala Ala Gly Gly
      20              25              30
Asn Thr Arg Glu Asn Asn Pro Tyr His Leu Leu Gly Asn Asp Lys Val
      35              40              45
Glu Lys Glu Ala Lys Lys Glu Glu Lys Glu Ala Glu Lys Glu Lys
      50              55              60
Glu Ala Val Lys Glu Lys Lys Lys Glu Ala Lys Glu Cys Lys Lys Ala
      65              70              75
Val Lys Val Cys Ala Lys Lys Lys
      80              85              90

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